

**Amendments to the Claims:**

This listing of the claims will replace all prior versions and listings of the claims in this application:

1-16. (Cancelled)

17. (New) A method for measuring current flow through a living body, comprising:  
measuring a voltage between a first contact located at a first position on a living body and said second contact located at a second position on the living body;  
providing a known impedance, separately from said measuring, between said first position and said second position for the living body; and  
calculating the current flow associate with said voltage.

18. (New) A method for measuring current flow through a living body, consisting essentially of:  
attaching a first contact to a living body at a first position;  
attaching a second contact to the living body at a second position;  
measuring a voltage between said first contact and said second contact;  
providing a known impedance between said first position and said second position for the living body; and  
calculating the current flow associated with said voltage.

19. (New) A system for measuring current flow through a living body, comprising:  
data acquisition circuitry comprising a first contact and a second contact configured to generate voltage data from a living body;  
a data processing unit configured to calculate a current flow associated with said voltage data based upon generic body impedance data.

Applicants have separately authorized the payment of the fee due for the new claims. Otherwise, Applicants believe that no fee is due with this submission. However, if it is determined that a fee is due, please charge the required fee to Pennie & Edmonds LLP Deposit Account No. 16-1150. A copy of this sheet is enclosed for this purpose.

Respectfully submitted,

  
PENNIE & EDMONDS LLP

Date: <u>July 7, 2003</u>	By: <u>DR</u>	40,756
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